



Topic	General Aims By the end of this unit students should be able to:	Specific VSA Learning Objectives By the end of this unit students should know/be able to:	Main Resource(s)
Index and exponent	<ul style="list-style-type: none"> Students will develop an understanding of how numbers can grow or shrink rapidly. 	⇒ Learn the Laws of Exponents ⇒ Learn Scientific Notation ⇒ Factorization of Quadratic Polynomials in One Variable ⇒ Factorization of Quadratic Polynomials in Two Variable	New Trend Mathematics TextBook S3B Chapter 1 & 2
			Support Resources
			Various worksheets Mathletics
Guiding Question	Main Areas of Interaction Focus	Learner Profile	
How do numbers get out of control?	Environments: awareness, responsibility, action, and reflection.	Open-minded—students might find ways to solve similar problems in their previous years of learning, but with some new identities, things might get easier for a lot of them.	
	Technology	Assessment	
	Scientific Calculator Spreadsheets	Assessments on Criterion A and B	
	Embedded Enquiry	Cross-curricular Links	

		<p>Study rabbits in Australia--how did they become a problem?</p> <p>--Exponential Growth</p> <p>Study bacteria cultures.</p> <p>--Exponential Growth</p> <p>Study nuclear radiation.</p> <p>--Exponential Decay</p> <p>Study distances traveled in the solar system.</p> <p>--Scientific Notation</p>
ATL	<p>Be Organized</p> <p>Using a Scientific Calculator</p> <p>Finding Patterns to Discover the Laws of Exponents</p>	